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Gamification of the Hiring Process

The application of game mechanics and game design – often called gamification – in non-gaming contexts such as in business, education, and social projects has emerged as a major trend in recent years. When applied effectively, gamification solutions produce tremendous benefits. Successful examples are as wide ranging as Xerox improving engagement and information retention in employee training sessions using a gamification app,[1] Khan Academy implementing gamification elements into learning curriculums,[2] gamers playing a protein-folding game and unlocking the structure of an AIDS-related enzyme in one week, something the scientific community had been unable to do for a decade.[3]

Gamification has a particularly special place in the HR community. Modern day HR divisions take an increasingly data-driven approach to people management, i.e., the people analytics approach. People analytics bear on issues such as recruiting, performance evaluation, leadership, hiring and promotion, job design, compensation, and collaboration.

Integral to gaining these insights is the ability to collect high-quantity and high-quality data. Gamification can enhance this endeavor. People love games! If the Pokemon GO craze is not proof enough, think of the scores of games you have seen played around you. Suddenly, even your technologically outdated, VCR-owning uncle is a gamer. The Dutch historian and anthropologist Johan Huizinga, founder of the field of cultural history, went as far as calling our species "homo ludens" (the playing man). Gamification can tap into this near universal love for game play and channel it into driving increased participation and motivation in employees and potential employees. For instance, gamifying employee training at Xerox led to an impressive 94 percent employee participation rate of the training. Increased participation and motivation leads to increased quantity and quality of data. Gamified strategies are especially successful with millennials.[4] A recent Pew Research Center analysis of U.S. Census Bureau data shows that millennials are now the largest share of the American workforce.[5] Consequently, game solutions offer to engage the majority proportion of the working population.

Elevating participation is not the only advantage provided by games. Games are a powerful instrument for studying human behavior. In a game, rather than asking someone what they did, you can directly observe their behavior. For instance, the popular party game Mafia[6] has been used to study the psychology of group behavior.[7] In recent years, the National Science Foundation, the U.S. Army Research Institute, and the U.S. intelligence community have been supporting projects that test human behavior using video game platforms.[8] By coupling the data advantage provided by gamification with sophisticated analytic techniques, meaning can be extracted. These data-driven approaches are better at dealing with complex data sets, capturing nonlinear relationships, and predicting future outcomes. As a result, they are better suited to modeling real-life complex problems.

The general benefit of gamification solutions using a data-driven approach is the future. We will now return to HR activities and focus on an important one, the hiring process. We will consider some of the major challenges in the hiring process and discuss gamification approaches to overcome them. The issues fall into these categories: (1) recruiting efficiency (2) workforce diversity, and (3) employee retention. Many of the solutions we offer come from pymetrics, a next generation career search platform (think OkCupid for careers). pymetrics uses game versions of science-based behavioral assessments and data science techniques to help companies effectively harness human capital and help jobs seekers find career paths that capitalize on their strengths.

Recruiting Efficiency

Data and gamification are invaluable when deciding which applicant to invite for an interview. A recent report states that each job opening attracts 250 applicants.[9] Clearly, all 250 cannot be interviewed; meaning that companies need a mechanism for selecting interviewees. For now, companies widely rely on the résumé, a mode that is disliked by both candidates and recruiters. Candidates often feel their abilities lose richness when translated to lists of accomplishments. Recruiters often complain that résumés are indistinguishable. Importantly, critical drivers of success such as emotion intelligence don't appear on a résumé. The People Analytics division at Google has found that team success is impacted by the "social sensitivity" of team members, i.e., the ability to perceive how others feel by using facial expressions and other non-verbal cues.[10] A résumé lacks this sort of information.

Games are a useful portal for obtaining such data – and in this context, simpler is better. For example, if the task is pattern recognition and the pattern is embedded within an elaborate setting, subpar performance could be driven either by poor pattern recognition or by deficient distraction filtering. Cause and effect at the data analysis stage of elaborately designed games becomes difficult, if not impossible. The greater the number of design elements, the higher the risk of result of contamination, and the harder it is to interpret behavior, to the point that it is impossible to directly link a behavior to a specific measure. If design features are limited, the game assessments can be consistently and reliably applied across all applicants. pymetrics has adapted games directly from the neuroscience and cognitive psychology research literature, attesting to their reliability and validity for measuring these behaviors. The games assess a wide range of inherent traits, such as an applicant's ability to read the emotional state of others, their ability to integrate non-verbal cues with contextual information, and facets of their attention and memory. Lastly, the whole game suite only takes 25 minutes to complete, with immediate feedback, allowing the recruitment process to move swiftly. Screening processes at companies can be reduced from months to weeks or even days when utilizing a suite of automated services combined with traditional on-site interviews.

Workforce Diversity

Hiring processes are still biased. Men outnumber women in many fields, despite there being an abundance of objectively qualified women. This is because recruiters, men and women alike, fall prey to unconscious bias.[11] Unconscious bias influences our decisions in ways we can't notice and can't control. Even champions for working women have rated the exact same résumé as more qualified when it has a man's name, compared to when it has a woman's name.[12]

Mitigating our unconscious bias can cause sweeping changes. One major breakthrough was in the hiring patterns of symphony orchestras. As late as 1970, the top five orchestras in the U.S. had fewer than five percent women. In the 1970s, a number of orchestras adopted "blind" auditions whereby screens are used to conceal the identity and gender of the musician from the jury.[13] In the years after these changes were instituted, the number of women increased to 25 percent, and two decades later, the number was at 35 percent. Gamified assessments can serve as a form of blind auditions. In addition, science-based platforms such as pymetrics go a step beyond, complementing the blinding process by removing any residual bias and guaranteeing that the predictive algorithms will recommend equal numbers of men and women, and people of different ethnicities for a position, ensuring that at a minimum, companies are sourcing an unbiased set of candidates for evaluation.

Employee Retention

Studies show that attrition can cost up to twice the annual salary of a full-time employee. Losing an employee, whether due to voluntary or involuntary attrition, is costly. Josh Bersin, founder and principal of Bersin & Associates, Deliotte's talent management, research and advisory services group, makes the case that economic value of employees appreciate over time.[14] The same game solutions that are used during the initial hiring process can be integrated directly into a company's careers marketplace to help unhappy employees find a more suitable role within the same organization. Incorporating such a system reduces knowledge and cultural loss by facilitating internal mobility within the jobs marketplace of companies.

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Summary

According to industry trends, 30 to 50 percent of recruiting efforts fail, meaning that the job offer is not accepted or the person resigns within the first year.[15] This is not a consequence of deficient human capital; it is the consequence of using impoverished data for key decision-making processes. The right game-based assessment can drastically improve the hiring process. Gamification can increase engagement, get an objective read on behavior, and provide a platform for blind auditions. In symbiosis with advanced analytics and data-driven decision-making, we can now achieve recruiting efficiency, unbiased talent assessment, and increased employee retention.

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As a pre- and post-doctoral fellow at Harvard and MIT, Dr. Friday Polli studied cognitive and emotional processing in healthy controls and psychiatric conditions. She has more than 30 publications, conferences presentations, and plenary talks. She has 11 awards in neuroscience including several National Research Service Awards from the National Institute of Health (NIH), as well as a NARSAD Young Investigator Award. She won the MIT Life Sciences Track Entrepreneurship Competition in 2010. She has a Ph.D. in Neuropsychology from Suffolk University, an MBA from Harvard Business School, and a B.A. in English from Dartmouth.

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